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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/822,599	04/12/2004	Thomas R. Keyer	8932-927-999	3549
51832	7590	03/03/2006	EXAMINER	
JONES DAY 222 EAST 41ST STREET NEW YORK, NY 10017-6702			SHAFFER, RICHARD R	
			ART UNIT	PAPER NUMBER
			3733	
DATE MAILED: 03/03/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/822,599

Applicant(s)

KEYER ET AL.

Examiner

Richard R. Shaffer

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-76 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13, 15, 21-37, 39, 45-53, 55-64 and 71-76 is/are rejected.
- 7) ☒ Claim(s) 14, 16-26, 38, 40-50, 54 and 65-76 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 April 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 8/23/2004, 12/20/2005
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Drawings

The drawings are objected to because **Figures 2 and 3** show one embodiment of holder assembly with **figures 4 and 5** showing another embodiment with the same reference character numerals. Same issue with **figures 6 and 7** compared with figures 8 and 9. Again, with **figures 10-12** against **figures 13-15**. Also figure 16 is an embodiment of actuator against **figures 17 and 18**. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

Claims 21-26, 45-50, and 71-76 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-13, 15, 21, 30-37, 39, 51-53, 55-64, and 71 are rejected under 35 U.S.C. 103(a) as being unpatentable over Markworth, et al (US Patent 6,660,006) in view of Lichtman (US Patent 5,318,589).

Markworth, et al disclose a rod persuader (100) with a holder assembly (200), release assembly composed of a tubular-like member (300) and pusher member (400), and an actuating member (700). The actuating member moves the tubular member forward in relation to an external viewer. However, in relation to the release assembly, the holder assembly is what is being translated. The pusher member is sized and configured to slidably surround the distal end of the holder assembly. The pusher member has an interior surface, which engages, with the external surface of fingers (206) when movement of the holder assembly in respect to the release assembly

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occurs. The actuating member is movable between a rest position and an actuated position.

Markworth, et al lacks a conventionally understood tubular member being sized and configured to be slidably disposed within the holder assembly. Lichtman teaches a forceps showing actuation of jaws using an inner tube (10) and an outer tube (8). It further includes a sleeve (66) to support closure and storage of the jaws through reinforcement. It was taught (Column 9, Line 67 to Column 10, Line 15) that the sleeve and distal end of the device could either be flared or of equal diameter to the rest of the sleeve. In Markworth, et al's device, it would have been important to maintain an open cannula for having a fastener disposed within. Thus it would have been obvious to one of ordinary skill to interchangeably use sliding plate/tubular-like elements (200 and 300) of Markworth, et al and coaxial tubes (8 and 10) of Lichtman to operate jaws/fingers at the distal end of a device to grasp an object.

Markworth, et al discloses fingers (206) at the distal end of the holder assembly and a recess (418) at the end of the pusher member for engaging a spinal rod. The fingers compress and release and grip an implant with inward pointing protrusions at an edge of a recess (105, **Figure 1E**). In **Figure 2** one can see that two U-shaped recesses (located between 206 and 214) in the holder assembly, which correspond with the previous, recess 418. The distal end of the tubular member has two holes (308) that correspond to the holes (412) of the pusher member in order to receive one pin for securing the pusher member to the tubular member. The proximal end of the holder assembly and tubular member contain holes or "slots" (220) and (306) respectively to

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receive a portion of the actuating member (the screws for attachment). The holes double as a way to facilitate proper alignment of the tubular member within the holder assembly.

In regard to claims 51-53, it is well known in the art of surgical tools that modular components lend themselves to ease of cleaning, storage, and manufacture. Thus it would have been obvious to one of ordinary skill to exchange the pin/screw connection of Markworth, et al with slotted snap-on connections with the claimed limitations set forth by claims 51-53.

In regard to claims 21 and 71, **Figure 1E** discloses a spinal implant with a body having a channel, an anchor member, and a set screw fastener (**120**).

Claims 22-26, 46-50, and 72-76 are rejected under 35 U.S.C. 103(a) as being unpatentable over Markworth, et al in view of Lichtman and further in view of Errico, et al (US Patent 5,688,274).

Markworth, et al and Lichtman as described above disclose all of the limitations except are silent in terms of detailed structure for a spinal rod implant. Errico, et al teach a polyaxial bone anchor (**Figure 21**) with the anchor member having a curvate head, which is housed in a recess of the lower portion of the body member. The lower portion is compressible due to the presence of slits. It further includes a collar (**250**), which compresses the recess.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 27-29 and 45 are rejected under 35 U.S.C. 102(e) as being anticipated by Markworth, et al. See above for reasons of anticipation.

Allowable Subject Matter

Claims 14, 16-20, 38, 40-44, 54, and 65-70 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: the prior art fails to disclose or suggest a device capable of inserting a rod into a spinal implant with two coaxial tubes with a collar and the claimed proximal setup with a snap-on connection, slots interacting between the inner and outer tube, and using pins for alignment.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard R. Shaffer whose telephone number is 571-272-8683. The examiner can normally be reached on 7-5 (Mon-Fri, every other Fri off).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eduardo Robert can be reached on 571-272-4719. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Richard Shaffer

rrs
9/26/2005

David O. Reip
DAVID O. REIP
PRIMARY EXAMINER